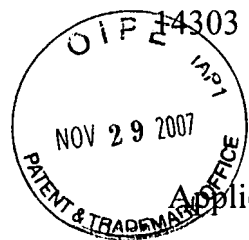


AF-  
90



4303 (0901.68198)

PATENT APPLICATION

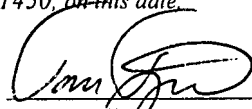
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richard J. Ernst  
Serial No.: 10/687,451  
Conf. No.: 8743  
Filed: October 16, 2003  
For: ROD HANGER FOR SECURING A  
ROD TO A SUBSTRATE  
Art Unit: 3632  
Examiner: Epps, Todd Michael

*I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.*

November 27, 2007

Date

  
Registration No. 40,607  
Attorney for Applicant(s)

TRANSMITTAL

Mail Stop Appeal - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

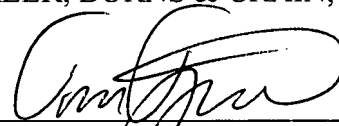
Sir:

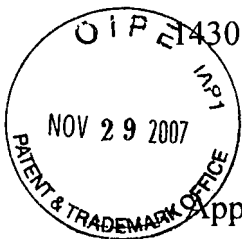
- (X) **Appellants' Brief On Appeal Under 37 C.F.R. § 1.192 with check for \$510.00.**
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 07-2069. A duplicate copy of this sheet is enclosed.

300 South Wacker Drive  
Suite 2500  
Chicago, IL 60606  
Tel: (312) 360-0080  
Customer No. 24978

GREER, BURNS & CRAIN, LTD.

By:

  
Thomas R. Fitzsimons  
Registration No. 40,607



4303 (0901.68198)

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richard J. Ernst  
Serial No.: 10/687,451  
Conf. No.: 8743  
Filed: October 16, 2003  
For: ROD HANGER FOR SECURING A  
ROD TO A SUBSTRATE  
Art Unit: 3632  
Examiner: Epps, Todd Michael

*I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date.*

November 27, 2007

Date

Registration No. 40,607  
Attorney for Applicant(s)

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

GREER, BURNS & CRAIN, LTD.  
300 South Wacker Drive  
Suite 2500  
Chicago, Illinois 60606  
Telephone: 312.360.0080  
Facsimile: 312.360.9315

Date: November 27, 2007

11/29/2007 WASFAW1 00000026 10687451

01 FC:1402

510.00 0P

## TABLE OF CONTENTS

REAL PARTY IN INTEREST .....	4
RELATED APPEALS AND INTERFERENCES.....	4
STATUS OF CLAIMS .....	4
STATUS OF AMENDMENTS .....	4
SUMMARY OF CLAIMED SUBJECT MATTER .....	5
GROUND OF REJECTION TO BE REVIEWED ON APPEAL.....	7
ARGUMENT .....	7
CONCLUSION.....	21
CLAIMS APPENDIX.....	22
EVIDENCE APPENDIX.....	27
RELATED PROCEEDINGS APPENDIX .....	28

14303 (0901.68198)

PATENT APPLICATION

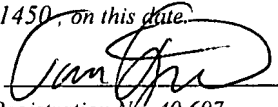
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richard J. Ernst  
Serial No.: 10/687,451  
Conf. No.: 8743  
Filed: October 16, 2003  
For: ROD HANGER FOR SECURING A  
ROD TO A SUBSTRATE  
Art Unit: 3632  
Examiner: Epps, Todd Michael

*I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.*

November 27, 2007

Date

  
Registration No. 40,607  
Attorney for Applicant(s)

**APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is in support of Applicants' Notice of Appeal dated September 27, 2007 from the Final Rejection dated April 27, 2007.

### **REAL PARTY IN INTEREST**

The real party in interest in this case is Illinois Tool Works Inc., 3600 West Lake Avenue, Glenview, Illinois, 60025.

### **RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences related to this application.

### **STATUS OF CLAIMS**

Claims 1, 2, 8, 12, 26, and 31-36 are pending. All other claims have been cancelled. No claims have been allowed. Claims 1, 2, 8, 12, 26, and 31-36 stand rejected in a final rejection mailed April 27, 2007.

### **STATUS OF AMENDMENTS**

Amendment F was filed on February 9, 2007, and was the last amendment filed. All amendments have been entered and considered. No amendments were filed subsequent to the final rejection mailed April 27, 2007.

## **SUMMARY OF CLAIMED SUBJECT MATTER**

The rejections of claims 1, 35 and 36 are appealed. Claims 1, 35 and 36 are independent. Claim 32 depends from claim 35. A concise summary of these claims follows.

Referring to independent claim 1, a rod hanger 10 for attachment to a substrate 14 comprises a mounting portion 28 (page 4, lines 18-22) (Fig. 1) having a hole 38 for engaging a fastener 40 that is driven into the substrate 14 (page 5, lines 14-16) (Fig. 1). A rod receiving portion 16 is configured to threadably engage the rod 12 (page 4, lines 13-16) (Fig. 1). A connecting element 26 vertically displaces the mounting portion 28 from the rod receiving portion 16. (page 4, lines 16-18) (Fig. 1)

At least four anti-rotation elements 42 are located on a mounting portion generally planar top surface 34 (page 5, lines 15-18) (Figs. 1, 3, 5, 9, 13). The anti-rotation elements 42 are configured for engaging the substrate 14 that the fastener 40 is driven into and for counteracting a moment acting upon the rod hanger 10 as the rod is threadably received by the rod receiving portion 16 (page 5, lines 15-20). The anti-rotation elements 42 have one of a generally hemisphered shape and a generally truncated hollow cone shape (page 7, lines 9-12) (Figs. 1, 3-6).

Referring now to claim 35, a rod hanger 10 for attachment with a fastener 40 to a substrate 14 comprises a mounting portion 28 having a planar top surface 34 configured for engaging the substrate 14 that the fastener is driven into (page 4, lines 17-22) (Fig. 1). A rod receiving portion 16 is configured for threadably receiving the rod 12 and a connecting element 26 is configured for vertically displacing the mounting portion 28 from the rod

receiving portion 16. (page 4, lines 13-19) (Fig. 1). At least four anti-rotation elements 42 are located on the mounting portion generally planar top surface 34. (page 5, lines 15-18) (Figs. 1, 3, 5, 9, 13). The anti-rotation elements 42 are configured for counteracting a moment acting upon the rod hanger 10 as the rod 12 is threadably received by the rod receiving portion 16. (page 5, lines 15-20). The anti-rotation members 42 are provided with a resilient cover 54 formed of a rubber or polymer. (page 7, lines 3-5) (Figs. 3-4). The resilient cover 54 is attached to the anti-rotation elements 42 using a chemical adhesive or by thermoforming, and the cover 54 may extend fully over the anti-rotation elements 42. (page 7, lines 5-8) (Figs. 3-4).

Referring now to claim 36, a rod hanger 10 is provided for attachment with a fastener 40 to a substrate 14 when the fastener is driven into the substrate and frictionally held in the substrate (page 4, lines 17-22) (Fig. 1). The rod hanger 10 is configured for securing a rod 12 to the substrate 14 and comprises a mounting portion 28 having a generally planar top surface 34 configured for engaging the substrate 14 into which the fastener is driven and that frictionally holds the fastener 40 (page 5, lines 14-16) (Fig. 1). A rod receiving portion 16 is configured for threadably receiving the rod 12 (page 4, line 14) (Fig. 1). A connecting element 26 vertically displaces the mounting portion 28 and the rod receiving portion 16. (page 4, lines 18-20) (Fig. 1).

At least four anti-rotation elements 42 are located on the mounting portion generally planar top surface 34 and configured for engaging the substrate 14 into which the fastener 40 is driven and for counteracting a moment acting upon the rod hanger 10 as the

rod 12 is threadably received by the rod receiving portion 16. (page 5, lines 15-20) (Figs. 1, 3, 5, 9, 13). A resilient cover 54, 56 is provided for enhancing the adhesion of the mounting portion 28 with the substrate 14. (page 7, lines 3-5) (Figs. 3-4).

Referring now to claim 32, it depends from claim 36 and further recites that the resilient cover 54, 56 is formed of a polymer and extends fully over the anti-rotation members 42 and is secured to the anti-rotation members 42 by one of a chemical adhesive or thermoforming. (lines 5-8, page 7) (Figs. 3-4).

### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The rejections of independent claims 1, 35 and 36, and the rejection of dependent claim 32 are to be reviewed on appeal. Claim 1 stands rejected as obvious under 35 U.S.C. §103(a) over U.S. Patent No. 5,758,465 to Logue (“the ‘465 patent”) in view of U.S. Patent No. 5,546,723 to Jones (“the ‘723 patent”). Claims 32, 35 and 36 stand rejected under 35 U.S.C. §103(a) as obvious over the ‘465 patent in view of the ‘723 patent, and in further view of U.S. Patent No. 6,677,185 to Chin (“the ‘185 patent”).

### **ARGUMENT**

The present invention provides a rod hanger with anti-rotation elements for reducing the effect of rotational moments encountered during or after installation. As explained in the Background of the Invention section of the present application, prior art rod hangers were subject to undesirable rotation about their mounting position on a substrate as a



result of rotational moments acting on the hanger when a rod was threaded into the hanger. Thus readjustment of the hanger was sometimes required after installation. The present invention addresses this and other problems by providing anti-rotation elements in a particular configuration.

The Examiner concedes that the present invention is novel, but rejected claim 1 on the basis of a combination of the '465 patent and the '723 patent, and rejected claims 32, 35 and 36 further in view of '185 patent. The '465 patent describes a rod hanger of the prior art, without any anti-rotation elements. The '723 patent describes a wood sill reinforcement plate having gripper prongs. The '185 patent describes a method of affixing a heat sink to a semiconductor substrate.

Issues on this appeal include:

- I. Whether the gripper prongs of the '723 patent disclose the anti-rotation elements required by claim 1 to support an obviousness rejection of that claim;**
- II. Whether the polymer cover disclosed by the '185 patent can support the obviousness rejections of claims 32, 35 and 36.**

**I. THE GRIPPER PRONGS OF THE ‘723 PATENT FAIL TO DISCLOSE THE CLAIMED STRUCTURE OF THE ANTI-ROTATION ELEMENTS OF CLAIM 1, AND THEREFORE THE OBVIOUSNESS REJECTION OF CLAIM 1 OVER THE ‘723 PATENT MUST BE REVERSED.**

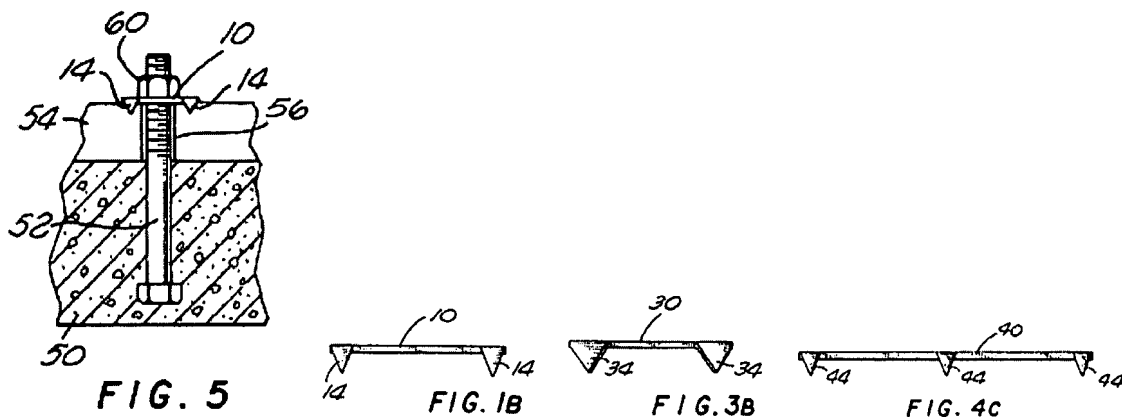
Independent claim 1 requires, among other elements, anti-rotation elements.

Claim 1 has been rejected as obvious over the ‘465 patent in view of the ‘723 patent. The Examiner admits that the ‘465 patent fails to disclose the recited anti-rotation elements, but alleges that the gripper prongs of the ‘723 patent satisfy this required element. This is incorrect, and the obviousness rejection must be reversed.

**I. A. THE SHARP POINTED GRIPPER PRONGS OF THE ‘723 PATENT DO NOT HAVE THE REQUIRED HEMISPHERED OR TRUNCATED CONE SHAPE OF THE ANTI-ROTATION ELEMENTS OF CLAIM 1, AND IN FACT TEACH AWAY FROM THIS CLAIMED STRUCTURE.**

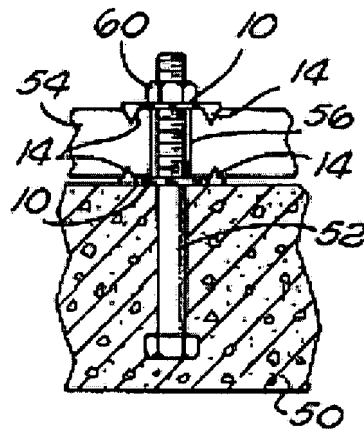
Claim 1 requires the anti-rotation elements to have one of a *hemisphered* shape or a *hollow truncated cone* shape. In the Final Office Action, the Examiner admits this claimed structure is not disclosed by the ‘723 patent, but suggests that it represents only an obvious variation in shape over that patent’s disclosure. It is submitted that this is not correct, and that the ‘723 patent not only fails to teach these shapes but further teaches away from them.

The ‘723 patent teaches that its gripper prongs 14 are “...*formed with a sharp point* so as to pass into and grip the wood sill ...” Col. 2, lines 58-59 (emphasis added). Each of FIGS. 5, 1B, 3B, 4C, and others likewise consistently illustrate gripper prongs 14, 34 and 44 (respectively) as having thin shapes with sharp points:



The '723 patent further teaches that the gripper prong sharp points are important to the intended purpose of its invention. The '723 patent is directed to reinforcing plates for engaging opposite sides of a wood sill (e.g., of a building frame) to provide a reinforced anchoring location for engaging an anchor bolt protruding from a concrete foundation. Abstract, Col. 2, lines 57-60. The '723 patent teaches that frame residential houses are typically tied to their foundation by attaching a lowermost wood sill of the house frame to anchor bolts that protrude from the foundation. Col. 1, lines 8-12. In earthquake conditions, the house is held to the foundation only through attachment to these anchor bolts. Col. 1, lines 26-30. A troubling problem of the prior art occurred under earthquake conditions which caused a foundation, including anchor bolts held therein, to shift. As the anchor bolts shift they moved into direct engagement with a side edge of the hole in the wood sill that they pass through and exerted a direct load on the building's wood sill at this side edge. Id. Such a load can cause the wood sill to split, with the building then breaking free from the foundation. Id.

The '723 patent addresses this problem through use of reinforcing plates having gripper prongs *with sharp points* to firmly grip opposite sides of the wood sill. Summary of the Invention, Col. 1, lines 45-49. After the sharp pointed gripper prongs have passed into and gripped the wood sill, the reinforcing plate is firmly anchored to the wood sill. Summary of the Invention, Col. 2, lines 57-60. The planar reinforcing plates are provided with central openings 22 for receiving the anchor bolt embedded in the foundation. Col. 2, lines 62-66. If the anchor bolt shifts during earthquake or other conditions, the bolt will then engage the edge of the reinforcing plate opening 22 instead of the sidewall of the wood sill. Summary of the Invention, Col. 2, lines 4-30. This can be further appreciated through consideration of Fig. 7:



**FIG. 7**

The '723 patent teaches that this configuration results in a much improved load transfer from bolt to wood that reduces risk of the wood sill splitting through direct engagement with the anchor bolt. Col. 2, lines 18-30. The '723 patent specifically teaches

that the sharp-pointed gripper prongs 14 improve over configurations that introduced “crushing” engagement with the sill:

“... the load forces are transferred to the wood sill by gripper prongs at the corners of the reinforcing plate. Standard washers need to crush down into the wood to restrain whereas the present invention does not ... since the gripper prongs transfer the load.”

Col. 4, lines 28-33.

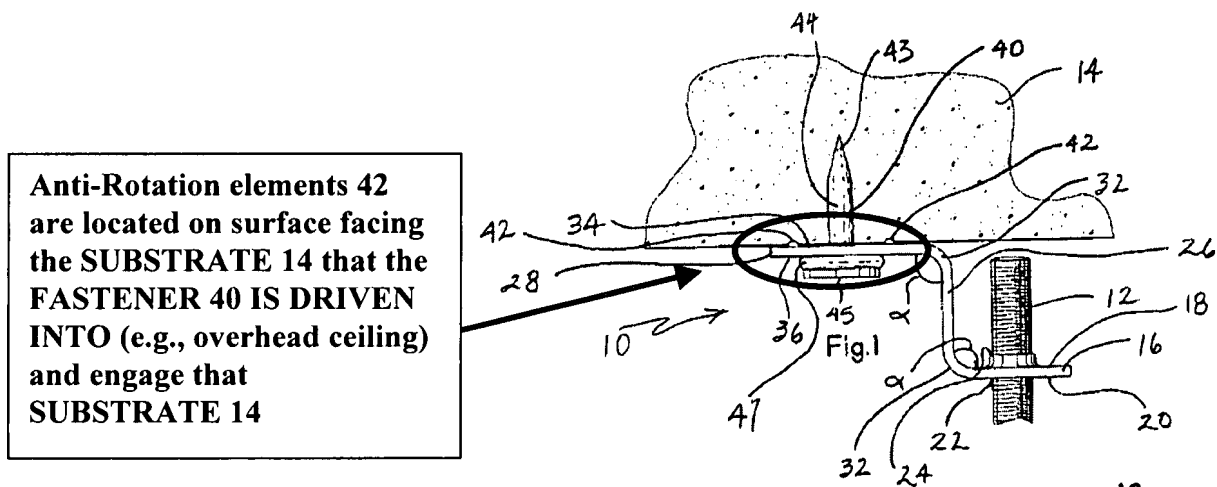
Accordingly, the thin shape and sharp points on the gripper prongs of the ‘723 patent are important to the intended purpose of its invention: to firmly anchor the reinforcing plate on the wood to thereby improve the transfer and distribution of the load from the anchor bolt to the wood sill and to avoid “crushing” engagement that can result using washers or the like. One considering the ‘723 patent would therefore not be led to the shapes required by claim 1: a generally hemisphered shape or a generally truncated hollow cone shape.

The presently claimed shapes do not have the “*sharp point*” that the ‘723 patent teaches is important to its gripper prongs. Instead of a sharp point, a hemisphered shape has a rounded top end and a truncated cone has a flat top end. This claimed structure would be expected to provide reduced penetration and gripping power of the wood sill verses the sharp pointed gripper prongs 14 of the ‘723 patent. Further, these shapes would be expected to apply some crushing engagement on the wood sill as they were forced downward into it due to their cross-sectional width and lack of a sharp point. The ‘723 patent expressly teaches away from such engagement: “(s)tandard washers need to crush down into the wood to restrain whereas the present invention does not ...” Col. 4, lines 28-33.

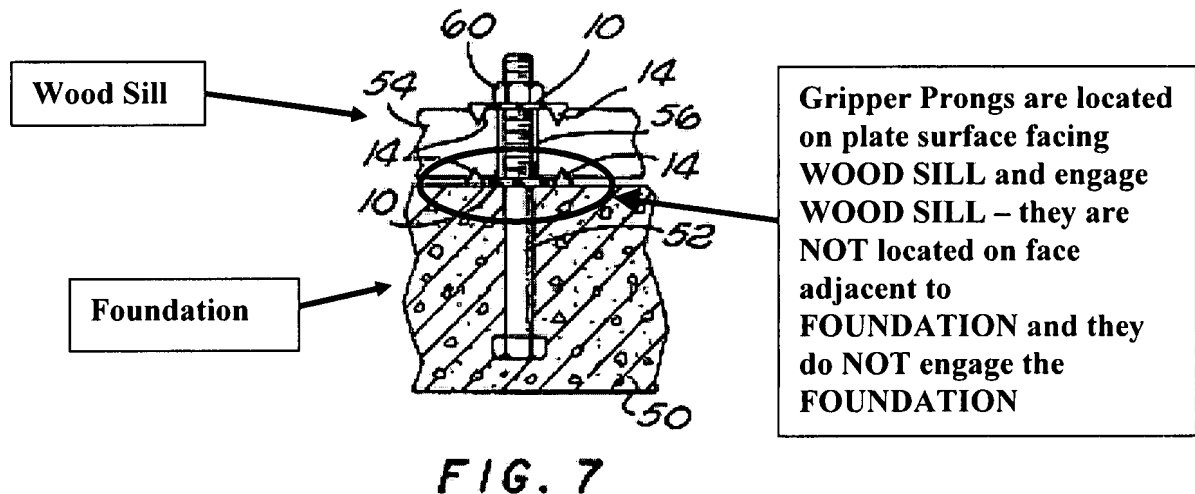
For these reasons it is submitted that the gripper prongs 14 of the '723 patent fail to disclose or suggest the required hemisphered or truncated cone shape of the anti-rotation elements of claim 1, and in fact teach away from this claimed structure. The obviousness rejection of claim 1 must therefore be reversed.

#### **I. B. THE '723 PATENT FAILS TO TEACH THE ANTI-ROTATION ELEMENT REQUIRED LOCATION OR REQUIRED ENGAGEMENT OF CLAIM 1**

Claim 1 also requires, among other elements, that the anti-rotation elements are located on the “*planar ... surface configured for engaging the substrate that the fastener is driven into...*” and be configured for engaging “*the substrate that the fastener is driven into and that frictionally holds the fastener in place.*” That is, the anti-rotation elements are located on the mounting portion bracket face that engages the same substrate that frictionally holds the fastener in place, and the anti-rotation elements engage this same substrate. An example being the substrate 14 (e.g., a ceiling) as illustrated in FIG. 1 of the application:



The '723 patent fails to disclose this claimed structure, but instead teaches that the gripper prongs 14 are useful to grip the wood sill (not the underlying foundation which holds the anchor bolt), and that the gripper prongs 14 are located on the plate surface face that engages the wood sill 54 – they are *not* located on the plate face that engages the foundation and they do *not* engage the foundation. Figure 7 of the '723 patent is presented below for convenience of consideration, with comments provided:



Accordingly, the '723 discloses a different structure than what is claimed: the gripper prongs 14 are on a reinforcing plate surface that engages the wood sill 54 – this surface is *opposite from* the face that engages the foundation 50 (the substrate that holds the fastener). Further, the gripper prongs 14 do not engage the foundation 50 (the substrate that holds the fastener), but instead engage the wood sill 54 that rests on top of the substrate 50. The gripper prong location and engagement structure disclosed by the '723 patent is therefore

different from that claimed in claim 1. These are additional reasons that claim 1 is allowable over the '723 patent.

## **II. THE POLYMER COVER DISCLOSED BY THE '185 PATENT CANNOT SUPPORT THE OBVIOUSNESS REJECTIONS OF CLAIMS 32, 35 AND 36.**

Independent claim 35 requires, among other elements, "*a resilient cover formed of a polymer extending fully over said at least four anti-rotation members ... ; said resilient cover secured to said anti-rotation members by one of a chemical adhesive or thermoforming.*" Independent claim 36 requires, among other elements, "*a resilient cover for enhancing the adhesion of the mounting portion with the substrate.*" Claim 32 depends from claim 36 and further recites that: "*... said resilient cover is formed of a polymer and extends fully over said anti-rotation member, and is secured to said anti-rotation members by one of a chemical adhesive or thermoforming.*"

Each of claims 32, 35 and 36 stand rejected as obvious over the '465 patent in view of the '723 patent and in further view of the '185 patent. The Examiner admits that neither of the '465 or '723 patent disclose the resilient cover required by claims 32, 25 and 36, but cites the '185 patent for disclosing this. It is submitted that this is improper for several reasons, and that the obviousness rejection of claims 32, 35 and 36 must therefore be reversed.



## II. A. THE '185 PATENT FAILS TO DISCLOSE THE COMBINATION OF (1) A RESILIENT COVER THAT IS SECURED TO THE ANTI-ROTATION ELEMENTS BY (2) ONE OF A CHEMICAL ADHESIVE OR THERMOFORMING AS REQUIRED BY CLAIMS 32 AND 35

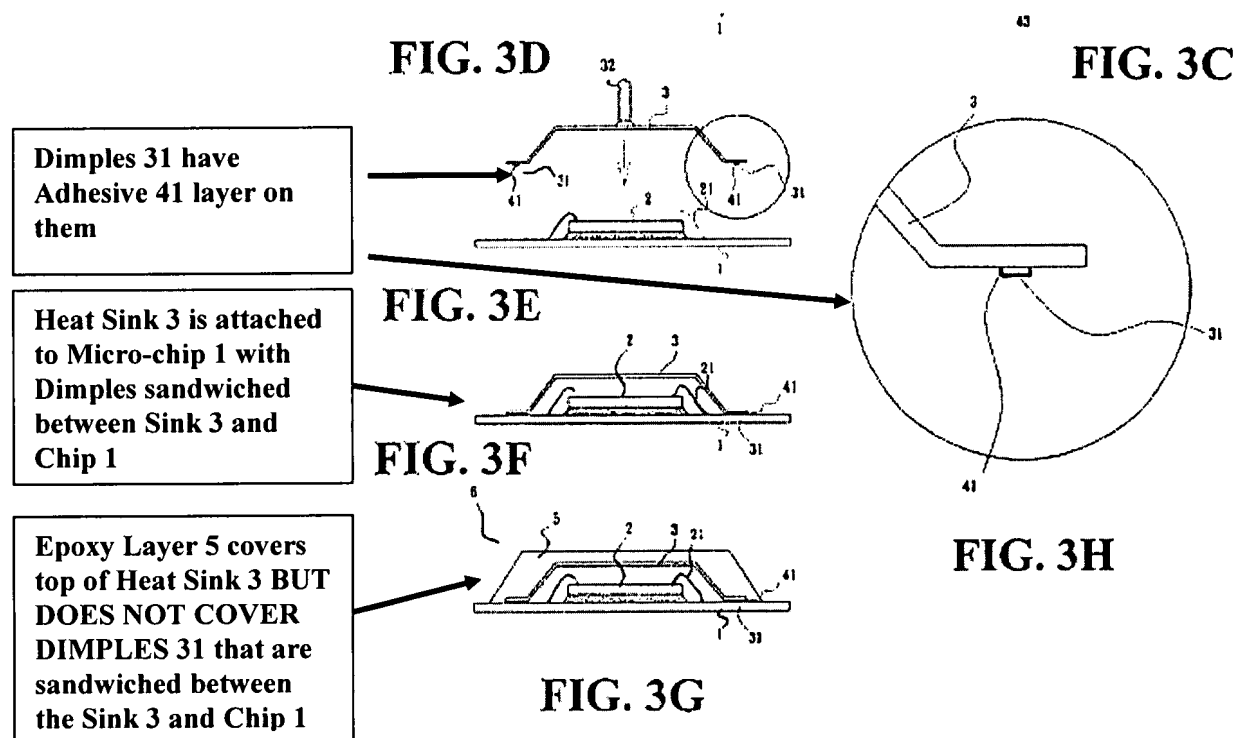
Claims 32 and 35 each require not only (1) a resilient cover formed of a polymer extending fully over the anti-rotation elements, but further require (2) that the resilient polymer be secured to the anti-rotation elements by one of a chemical adhesive or thermoforming. Claims 32 and 35 therefore require two distinct cover-related elements: (1) a resilient polymer cover, and (2) an adhesive layer or thermoforming that attaches the resilient layer to the anti-rotation elements. The '185 patent fails to disclose these two elements.

Instead, the '185 patent only discloses covering dimples 31 with an adhesive 41. Col. 3, lines 21-24. The '185 patent fails to disclose a *separate* polymer cover secured to its dimples 31 by the adhesive 41 (or in the alternative thermoforming a polymer cover over its dimples). Although the '185 patent discloses that an epoxy resin 5 is applied to the sink 3, this is only done *after* the dimples 31 (dipped in adhesive 41) have been attached to the substrate 1, with the result that the resin 5 is not attached to the dimples 31:

(T)he method comprising steps of .. utilizing a sucker to move the heat sink to a position above the layer of adhesive agent, and dipping the dimples of the heat sink into the adhesive layer so as to adhere some adhesive agent onto the dimples, and then moving the heat sink above the semiconductor chip; affixing the heat sink to the substrate to over the semiconductor chip, and enclosing the heat sink with epoxy resin.

Col. 2, lines 20-27. The dimples 31 are therefore sandwiched between the sink 3 and chip 1 with the adhesive 41 useful to attach the sink to the substrate 1. This is done *before* the epoxy 5 is applied, and the dimples 31 are therefore not exposed to the epoxy resin 5 which

instead covers only the exposed top of the heat sink 3. This can be further appreciated by considering steps 3D-3H illustrated by Fig. 3:



The '185 patent therefore only discloses an adhesive layer covering heat sink dimples, and does not disclose or suggest the combination of a (1) resilient polymer layer that is (2) secured to anti-rotation elements by one of an adhesive layer or thermoforming. That is, the '185 patent discloses only one of the two required cover related elements of claims 32 and 35. The obviousness rejection of these claims must therefore be reversed.

## II. B. IT IS NOT PROPER TO COMBINE THE '185 PATENT WITH THE '723 AND '465 PATENTS TO REJECT CLAIMS 32, 35 AND 36 SINCE THE '185 PATENT IS FROM AN UNRELATED AND NON-ANALOGOUS ART

A rigid application of the so-called “teaching/suggestion/motivation” test was rejected in *KSR Int’l. Co. v. Teleflex, Inc.*, 82 USPQ2d 1385 (2007), but the test was not

discarded. The Court simply required consideration of the general knowledge of those skilled in the art and other factors, using a common sense approach to obviousness.

There is no explicit or implicit suggestion or motivation to combine the references in the present case, nor is there any other reason to combine them. The '723 patent teaches a reinforcing plate useful to anchor a wood sill to a foundation. The '465 patent teaches a device for securing a rod to a ceiling. The '185 patent is completely unrelated to these disclosures. The '185 patent is titled "Method of Affixing a Heat Sink to a Substrate and Package Thereof" and teaches a method of affixing a heat sink to a micro-electronics substrate useful to dissipate heat from a semiconductor chip. Abstract. It relates to the assembly of heat sinks in the micro-electronics or related arts. *Id.*

Detailed workings of methods of affixing heat sinks to micro-electronics substrates such as micro-chips are not generally known to designers in the arts of devices for securing rods to ceilings or wood sills to building foundations. Even the general knowledge of these artisans as consumers would not include details of micro-electronics heat sink affixing methods. Thus, common sense leads to the conclusion that a designer of the present invention, i.e., a rod hanger for attaching a rod to a substrate such as a ceiling, would not be aware of methods of affixing a heat sink to a micro-electronics substrate useful to dissipate heat from a semiconductor chip. Moreover, that designer would have no inclination to look to micro-electronics heat sinks for solutions to problems related to rod hanger rotation during installation of a threaded rod. For this reason alone, it is inappropriate to cite the '185 patent (in combination with the unrelated '465 and '723 patents) in rejecting claims 32, 35 and 36.

Moreover, it is inappropriate to combine the ‘185 patent with the ‘465 and ‘723 patents because the ‘185 patent is not analogous art. M.P.E.P. 2141.01(a) states with respect to nonanalogous prior art that a reference must be either in a field of Applicant’s endeavor or, if not, then reasonably pertinent to the particular problem of which the inventor was concerned, citing *In re Oetiker*, 977F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

The ‘185 patent is clearly not in Applicants’ field of endeavor, namely rod hangers for attaching rods to substrates (such as an overhead ceiling). The ‘185 patent is in the unrelated field of affixing heat sinks to micro-electronics substrates (such as microchips). This is recognized by the Office. Classifications for the three patents cited in the rejection of claims 32, 35 and 36 are:

	<b>‘185 Patent</b>	<b>‘465 Patent</b>	<b>‘723 Patent</b>
<b>Title:</b>	<b>Method of Affixing a Heat Sink to a Substrate and Package Thereof</b>	<b>Clip and Method for Affixing a Rod to a Ceiling</b>	<b>Wood Sill Reinforcement Plate</b>
<b>International Classification:</b>	<b>H01L 21/48 H01L 21/50</b>	<b>E04B 1/38 E04B 9/00</b>	<b>F04B 1/38</b>
<b>US Classifications:</b>	<b>438/122, 257/796, 257/675, 361/709</b>	<b>52/506.05, 52/506.05, 52/704, 52/712, 403/403, 411/441, 411/485</b>	<b>52/698, 52/704, 52/410, 411/466, 411/163</b>

It is noteworthy that the ‘465 and ‘723 patent classifications overlap with one another, but that neither overlaps classifications of the ‘185 patent. Likewise, the field of search for the ‘185 patent does not overlap the field of search for either of the ‘465 or ‘723 patents, as seen

on the faces of the references. For all these reasons, Applicants submit that the '185 patent is not in Applicants' field of endeavor.

The '185 patent is also not reasonably pertinent to the problem with which the inventor of the present invention was concerned. In claims 32, 35 and 36, the claimed subject matter is a rod hanger that is attached to a substrate using a fastener, and that is useful to attach a rod to the substrate. A rod hanger is provided for threadably receiving a rod and attaching it to a substrate such as a ceiling. In addition, the present rod hanger includes anti-rotation elements that engage the substrate to reduce the effect of rotational moments encountered during installation of a rod being threaded into the rod hanger. Page 2, lines 9-12.

In contrast, the '185 patent, is directed to methods for affixing a heat sink to a micro-electronics substrate useful to dissipate heat from a semiconductor chip. Abstract. The '185 patent is silent regarding rod hangers, rod hanger anti-rotation elements, problems related to rotational moments addressed through anti-rotation elements, or resilient layers on such anti-rotation elements.

Since the '185 patent is not pertinent to the problems of the present invention and is not in Applicants' field of endeavor, Applicants respectfully requests removal of the '185 patent as non-analogous prior art.

## CONCLUSION

For the foregoing reasons, Applicants respectfully request that the rejection of claims 1, 32, 35 and 36 be reversed, with instructions to allow this application. Reversal of the rejections of these claims is called for based on at least the following reasons:

1. The sharp pointed gripper prongs of the '723 patent do not have the hemisphered or truncated cone shape required by claim 1, and in fact the '723 patent teaches away from this claimed structure.
2. The '723 patent fails to teach the anti-rotation element location or engagement required by claim 1.
3. The '185 patent fails to disclose or suggest the combination of (1) a resilient cover that is secured to the anti-rotation elements by (2) one of a chemical adhesive or thermoforming as required by claims 32 and 35.
4. It is not proper to combine the '185 patent with the '723 and '465 patents to reject claims 32, 35 and 36 since the '185 patent is from an unrelated and non-analogous art.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By

  
Tom R. Fitzsimons

Registration No. 40,607

November 27, 2007

300 South Wacker Drive  
Suite 2500  
Chicago, Illinois 60606  
Telephone: 312.360.0080  
Facsimile: 312.360.9315

Customer No. 24978

## **CLAIMS APPENDIX**

1. (Previously Presented) A rod hanger for attachment with a fastener to a substrate when the fastener is driven into the substrate and frictionally held in the substrate, the rod hanger for securing a rod to the substrate, comprising:

a mounting portion defining a perimeter edge, having generally planar top and bottom surfaces, said generally planar top surface configured for engaging the substrate that the fastener is driven into and that frictionally holds the fastener and having a hole extending between said top and bottom surfaces configured for engaging the fastener;

a rod receiving portion configured for threadably receiving the rod;

a connecting element configured for vertically displacing said mounting portion and said rod receiving portion; and

at least four anti-rotation elements on said mounting portion generally planar top surface spaced apart from said hole, spaced apart from said perimeter edge and configured for penetratingly engaging the substrate that the fastener is driven into and that frictionally holds the fastener in place and for counteracting a moment acting upon said rod hanger as the rod is threadably received by said rod receiving portion, said anti-rotation elements having one of a generally hemisphered shape and a generally truncated hollow cone shape.

2. (Previously Presented) The rod hanger of claim 1, wherein said rod receiving portion defines a generally planar shape.

3-7. (Canceled)

8. (Previously Presented) The rod hanger of claim 1, wherein said rod receiving portion includes a lip formation disposed about said hole and configured to threadably engage the rod.

9-11. (Canceled)

12. (Original) The rod hanger of claim 1, wherein said rod hanger defines a unitary body with a generally uniform thickness.

13-25. (Canceled)

26. (Previously Presented) The rod hanger of claim 1 wherein said mounting portion defines a plane, said hole defines a circumference of 360°, and wherein said at least four anti-rotation elements are disposed along said plane uniformly from said hole and spaced from one another by about 90° along the circumference of said hole.



27-31. (Canceled)

32. (Previously Presented) The rod hanger of claim 36 and wherein said resilient cover is formed of a polymer and extends fully over said anti-rotation member, and is secured to said anti-rotation members by one of a chemical adhesive or thermoforming.

33. (Previously Presented) The rod hanger of claim 1 wherein said hole extending between said mounting portion top and bottom surfaces is defined by a substantially smooth sidewall.

34. (Previously Presented) The rod hanger of claim 1 wherein the fastener has a shaft portion, and wherein said hole extending between said mounting portion top and bottom surfaces has a diameter substantially larger than the shank portion and is thereby configured to allow the shank portion to pass freely therethrough.

35. (Previously Presented) A rod hanger for attachment with a fastener to a substrate when the fastener is driven into the substrate and frictionally held in the substrate, the fastener including a shank portion, the rod hanger for securing a rod to the substrate, comprising:

a mounting portion defining a perimeter edge, having generally planar top and bottom surfaces, said generally planar top surface configured for engaging the substrate that

the fastener is driven into and that frictionally holds the fastener, having a hole extending between said top and bottom surfaces configured for engaging the fastener, said hole defined by a smooth sidewall and having a diameter substantially larger than said fastener shank portion configured to allow the shank portion to pass freely therethrough;

a rod receiving portion configured for threadably receiving the rod;

a connecting element configured for vertically displacing said mounting portion and said rod receiving portion;

at least four anti-rotation elements on said mounting portion generally planar top surface spaced apart from said hole, spaced apart from said perimeter edge and configured for engaging and penetrating the substrate that the fastener is driven into and that frictionally holds the fastener in place and for counteracting a moment acting upon said rod hanger as the rod is threadably received by said rod receiving portion; and,

a resilient cover formed of a polymer extending fully over said at least four anti-rotation members for enhancing the adhesion of the mounting portion with the substrate; said resilient cover secured to said anti-rotation members by one of a chemical adhesive or thermoforming.

36. (Previously Presented) A rod hanger for attachment with a fastener to a substrate when the fastener is driven into the substrate and frictionally held in the substrate, the rod hanger for securing a rod to the substrate, comprising:

a mounting portion defining a perimeter edge, having generally planar top and bottom surfaces, said generally planar top surface configured for engaging the substrate that the fastener is driven into and that frictionally holds the fastener and having a hole extending between said top and bottom surfaces configured for engaging the fastener;

a rod receiving portion configured for threadably receiving the rod;

a connecting element configured for vertically displacing said mounting portion and said rod receiving portion; and,

at least four anti-rotation elements on said mounting portion generally planar top surface spaced apart from said hole, spaced apart from said perimeter edge and configured for penetratingly engaging the substrate that the fastener is driven into and that frictionally holds the fastener in place and for counteracting a moment acting upon said rod hanger as the rod is threadably received by said rod receiving portion, and further including a resilient cover for enhancing the adhesion of the mounting portion with the substrate.

## **EVIDENCE APPENDIX**

None.

## **RELATED PROCEEDINGS APPENDIX**

None.